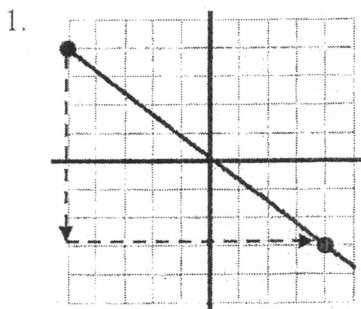


Algebra 1-2
5.1 Day 2 Homework

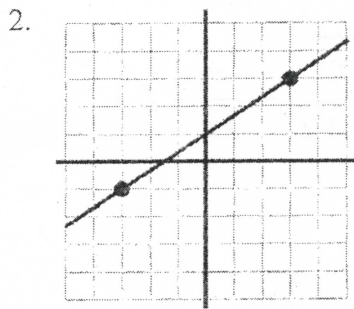
Name: ANSWER KEY
Period: _____ Date: _____

Find the slope of each line:

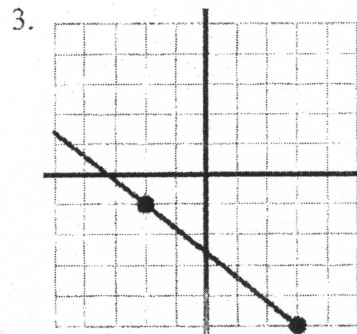
- a) Draw a right triangle to determine the rise and run. To go from one point to the other: left and down (-)
b) Determine the slope: $m = \frac{\text{rise}}{\text{run}}$ (reduce if able) right and up (+)



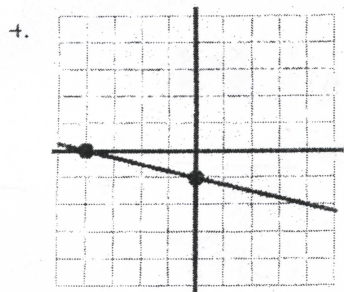
$m = \underline{-\frac{4}{3}}$



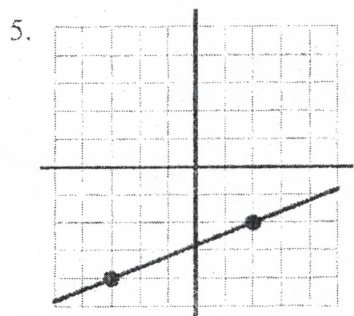
$m = \underline{\frac{2}{3}}$



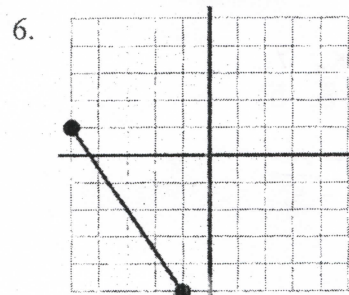
$m = \underline{-2}$



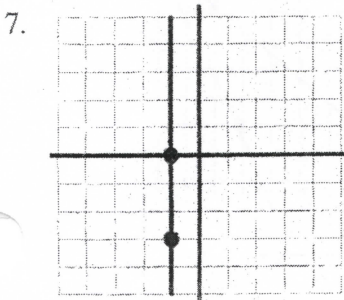
$m = \underline{-\frac{1}{2}}$



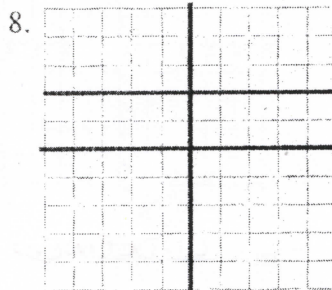
$m = \underline{\frac{1}{2}}$



$m = \underline{-2}$



$m = \underline{\text{UNDEFINED}}$



$m = \underline{0}$

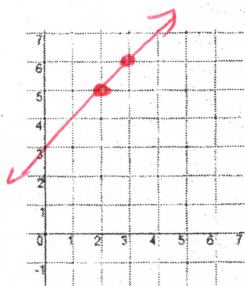
$$\frac{y_2 - y_1}{x_2 - x_1} = m$$

Find the slope of the line that passes through each pair of points. Verify with the graph.

9. $(2, 5), (3, 6)$

$$\frac{6-5}{3-2} = \frac{1}{1} = 1$$

$$\begin{array}{r|l} (2|5) & \\ - (3|6) & \\ \hline -1 & -1 \\ \hline \end{array} \rightarrow -1 = -1 = 1$$

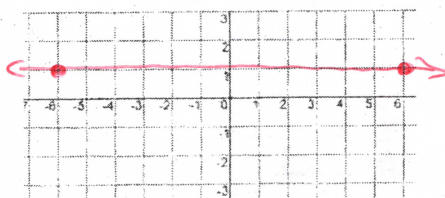


$$m = \frac{1}{1} = 1$$

10. $(6, 1), (-6, 1)$

$$\frac{1-1}{-6-6} = \frac{0}{-12} = 0$$

$$\begin{array}{r|l} (6|1) & \\ - (-6|1) & \\ \hline 12 & 0 \\ \hline \end{array} \rightarrow 12 = \frac{0}{12} = 0$$

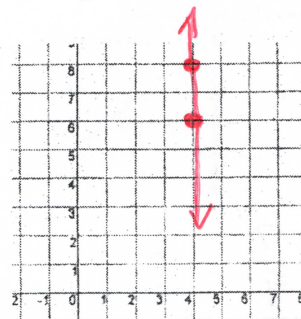


$$m = \frac{0}{12} = 0$$

11. $(4, 6), (4, 8)$

$$\frac{8-6}{4-4} = \frac{2}{0} \Rightarrow \text{UNDEFINED}$$

$$\begin{array}{r|l} (4|6) & \\ - (4|8) & \\ \hline 0 & -2 \\ \hline \end{array} \rightarrow 0 = \frac{-2}{0} \Rightarrow \text{UNDEFINED}$$

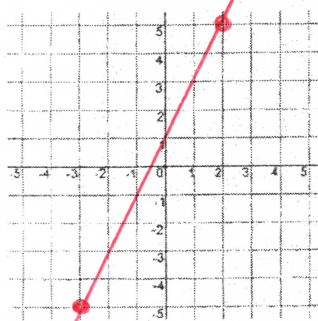


$$m = \text{UNDEFINED}$$

12. $(2, 5), (-3, -5)$

$$\frac{-5-5}{-3-2} = \frac{-10}{-5} = 2$$

$$\begin{array}{r|l} (2|5) & \\ - (-3|-5) & \\ \hline 5 & 10 \\ \hline \end{array} \rightarrow 5 = \frac{10}{5} = 2$$

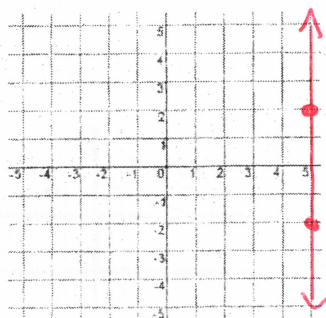


$$m = \frac{10}{5} = 2$$

13. $(5, 2), (5, -2)$

$$\frac{-2-2}{5-5} = \frac{-4}{0} \Rightarrow \text{UNDEFINED}$$

$$\begin{array}{r|l} (5|2) & \\ - (5|-2) & \\ \hline 0 & 4 \\ \hline \end{array} \rightarrow 0 = \frac{4}{0} \Rightarrow \text{UNDEFINED}$$

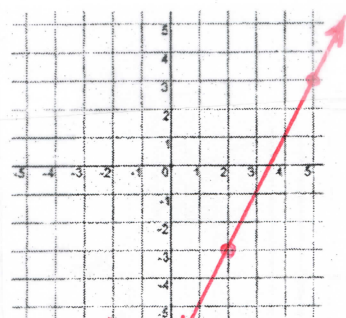


$$m = \text{UNDEFINED}$$

14. $(5, 3), (2, -3)$

$$\frac{-3-3}{2-5} = \frac{-6}{-3} = 2$$

$$\begin{array}{r|l} (5|3) & \\ - (2|-3) & \\ \hline 3 & 6 \\ \hline \end{array} \rightarrow 3 = \frac{6}{3} = 2$$



$$m = \frac{6}{3} = 2$$